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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/083,098	02/26/2002	Michael P. Hills	MS160206.01	5421

27195 7590 10/10/2007

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EXAMINER	
NGUYEN, VAN H	

ART UNIT	PAPER NUMBER
2194	

NOTIFICATION DATE	DELIVERY MODE
10/10/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/083,098	HILLS ET AL.	
	Examiner	Art Unit	
	VAN H. NGUYEN	2194	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 July 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-8 and 10-27* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-8 and 10-27* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This communication is responsive to the amendment filed 07/26/2007.

Claims 1-8 and 10-27 are currently pending in this application.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-8, 10-14, and 25-27 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

- Claims 1-8, 10-14, 25, and 26 recite *a system* in the preamble only, the body of the claims merely contain software components. Therefore, the claims are software per se and do not fall within at least one of the four enumerated categories of patentable subject matter recited in section 101.
- The amended claim 27 is directed to a data structure embodied in computer-readable media. However, the claim does not define structural and functional interrelationships between the data structure and the computer software and

hardware components which permit the data structure's functionality to be realized.

Claims which are broad enough to read on statutory subject matter or on non-statutory subject matter are considered non-statutory. Cf. In re Lintner, 458 F.2d 1013, 1015, 173 USPQ 560, 562 (CCPA 1972) ("Claims which are broad enough to read on obvious subject matter are unpatentable even though they also read on nonobvious subject matter.") During prosecution, applicant can amend to limit the claims to statutory subject matter.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim 27 is rejected under 35 U.S.C. 102(e) as being anticipated by **Stanley** (US 6,219,742).

As to claim 27:

Stanley teaches a data structure stored on a computer readable storage medium employed by processes executing on a computer system that facilitates dispatching an SMBus event to an AML code event handler, the data structure comprising: at least one indexed AML code entry point; and at least one AML event handler entry point associated with the at least one indexed AML code entry point *(e.g., Fig.6c and the discussion beginning at col.16, line 50).*

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-8 and 9-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Stanley** (US 6,219,742) in view of **Tien et al.** (US 6138183 A).

As to claim 14:

Stanley teaches a system executing components one or more processors that facilitate access to an SMBus *(e.g., detection of events occurring in an ACPI-compatible system operating with a number of external devices, coupled to the platform (whether on the systemboard or via a PCI or other bus connection) via a set of General Purpose Event*

register blocks. The ACPI, or the Advanced Control and Power Interface, is a new paradigm for interfacing hardware and software. In an ACPI environment, both hardware/software interfacing and power management are determined by the operating system, rather than by the system Basic Input Output System and by the Advanced Power Management. The ACPI is intended to define hardware and software interfaces flexibly and abstractly, to allow flexible hardware and operating system design and implementation, with a minimum of inflexible interface requirements) [see the Abstract and the discussion beginning at col.3, line 66] comprising:

- a computer executable identifier that identifies an SMBus event notification at a driver *(e.g., see the ACPI driver and events discussion beginning at col.4, line 17)*; and
- a computer executable dispatcher in the driver that directly dispatches the SMBus event notification to a computer executable AML event handler *(e.g., see the event dispatching and event handler discussion beginning at col.6, line 32).*

Stanley does not specifically teach the claimed a three parameter buffer access read method to read data from an operation region associated with the SMBus or a three parameter buffer access write method to write data to an operation region associated with the SMBus.

Tien teaches Stanley does not specifically teach the claimed a three parameter buffer access read method to read data from an operation region associated with the SMBus or a

three parameter buffer access write method to write data to an operation region associated with the SMBus *(col.3, lines 33-51; col.5, lines 28-34; and col.9, line 12-col.10, line 50).*

It would have been obvious to one of ordinary skill in the art to modify Stanley with Tien because Tien's teaching would have allowed a PCI initiator to achieve the full 133-Mbps burst transfer rate and reduced system overhead without PCI to ISA bridging.

As to claim 25:

The rejection of claim 14 above is incorporated herein in full. Additionally, Stanley teaches the use of a _Qxx control method *(e.g., see the _Qxx control method discussion beginning at col.12, line 12);* and computer implemented means for locating an AML code event handler associated with the SMBus notification *(e.g., see the event handler discussion beginning at col.4, line 17).*

As to claim 26:

Stanley teaches means for the AML code event handler to access a data object employed to communicate with an SMBus *(see the discussion beginning at col.3, line 66).*

As to claim 15:

The rejection of claim 14 above is incorporated herein in full. Additionally, Stanley teaches receiving an SMBus event notification at a driver *(e.g., see the ACPI driver and*

events discussion beginning at col.4, line 17); and handling the SMBus event notification in AML code *(see the event handling discussion beginning at col.6, line 32).*

As to claim 16:

Stanley teaches the SMBus event notification is identified by examining at least one of a data and a status associated with the SMBus event notification *(see the discussion beginning at col.8, line 67).*

As to claim 17:

Stanley teaches indexing to a _Qxx control method via a registered AML event handler *(e.g., the registers and _Qxx control method discussion beginning at col.7, line 35).*

As to claim 18:

Stanley teaches reading an operation region associated with the SMBus that generated the SMBus notification *(see the discussion beginning at col.7, line 35).*

As to claim 19:

Tien teaches the operation region is accessed by a three parameter read, where a first parameter holds an initial data, a second parameter holds a reference to the operation region to be accessed and a third parameter holds data read from the operation region SMBus *(col.3, lines 33-51; col.5, lines 28-34; and col.9, line 12-col.10, line 50).*

As to claim 20:

Tien teaches the operation region is accessed by a three parameter read, where a first parameter holds an initial data, a second parameter holds a reference to the operation region to be accessed and a third parameter holds a reference to data read from the operation region *(col.3, lines 33-51; col.5, lines 28-34; and col.9, line 12-col.10, line 50).*

As to claim 21:

Stanley teaches writing an operation region associated with the SMBus that generated the SMBus notification *(see the discussion beginning at col.16, line 42).*

As to claim 22:

Tien teaches the operation region is written by a three parameter write, where a first parameter holds a data to be written to the operation region, a second parameter holds a reference to the operation region and a third parameter holds a returned status call *(col.3, lines 33-51; col.5, lines 28-34; and col.9, line 12-col.10, line 50).*

As to claim 23:

Tien teaches the operation region is written by a three parameter write, where a first parameter holds a reference to a data to be written to the operation region, a second parameter holds a reference to the operation region and a third parameter holds a returned status call *(col.3, lines 33-51; col.5, lines 28-34; and col.9, line 12-col.10, line 50).*

As to claim 24:

Stanley teaches the use of computer readable medium *(e.g., memory; see Fig.6C).*

As to claim 1:

Refer to the discussion of claim 14 above for rejection.

As to claim 2:

Stanley teaches the driver receives a status and a data associated with the SMBus event from the SMBus *(see the discussion beginning at col.8, line 67).*

As to claim 3:

Stanley teaches the driver employs a _Qxx control method to dispatch the SMBus event to the AML event handler *(e.g., see the _Qxx control method discussion beginning at col.12, line 12).*

As to claim 4:

Stanley teaches at least one AML event handler entry point is accessed by the _Qxx control method *(e.g., see the _Qxx control method discussion beginning at col.12, line 12).*

As to claim 5:

Tien teaches a first parameter of the three parameter buffer access read method provides an initial data to a computer component providing access to the operation region associated with the SMBus *(col.3, lines 33-51; col.5, lines 28-34; and col.9, line 12-col.10, line 50).*

As to claim 6:

Tien teaches a second parameter of the three parameter buffer access read method is a reference to the operation region associated with the SMBus from which the data will be read *(col.3, lines 33-51; col.5, lines 28-34; and col.9, line 12-col.10, line 50).*

As to claim 7:

Tien teaches a third parameter of the three parameter buffer access read method holds data read from the operation region identified by the second parameter *(col.3, lines 33-51; col.5, lines 28-34; and col.9, line 12-col.10, line 50).*

As to claim 8:

Tien teaches e a third parameter of the three parameter buffer access read method is a reference to a location to store the data read from the operation region identified by the second parameter *(col.3, lines 33-51; col.5, lines 28-34; and col.9, line 12-col.10, line 50).*

As to claim 10:

Tien teaches a first parameter of the three parameter buffer access write method is the data to be written to the operation region associated with the SMBus *(col.3, lines 33-51; col.5, lines 28-34; and col.9, line 12-col.10, line 50).*

As to claim 11:

Tien teaches a first parameter of the three parameter buffer access write method is a reference to the data to be written to the operation region associated with the SMBus *(col.3, lines 33-51; col.5, lines 28-34; and col.9, line 12-col.10, line 50).*

As to claim 12:

Tien teaches a second parameter of the three parameter buffer access write method is a reference to the operation region associated with the SMBus to which the data will be written *(col.3, lines 33-51; col.5, lines 28-34; and col.9, line 12-col.10, line 50).*

As to claim 13:

Tien teaches a third parameter of the three parameter buffer access write method is a status code returned by a computer component providing access to the operation region associated with the SMBus *(col.3, lines 33-51; col.5, lines 28-34; and col.9, line 12-col.10, line 50).*

Response to Arguments

5. Applicant's arguments regarding claims 1-8 and 9-27 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

6. The prior art made of record, listed on PTO 892 provided to Applicant is considered to have relevancy to the claimed invention. Applicant should review each identified reference carefully before responding to this office action to properly advance the case in light of the prior art.

Contact Information

7. Any inquiry or a general nature or relating to the status of this application should be directed to the TC 2100 Group receptionist: (571) 272-2100.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to VAN H. NGUYEN whose telephone number is (571) 272-3765. The examiner can normally be reached on Monday-Thursday from 8:30AM 6:00PM. The examiner can also be reached on alternative Friday. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, WILLIAM THOMSON can be reached at (571) 272-3718.

The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status

information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any response to this action should be mailed to:
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VAN H. NGUYEN
PRIMARY EXAMINER